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AIR FORCE SAFETY INVESTIGATION BOARD PRESIDENTS: AN ALTERNATIVE MANNING SOURCE

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Preface

As far back as I can remember, I wanted to fly. I could not think of any better feeling than to slip the proverbial surly bonds of earth and blast into the wild blue yonder. However, not long after I graduated from Undergraduate Pilot Training (UPT), I became aware of another, more sinister side of aviation. In those first few years of flying, I learned how many good men and women die each year in aircraft related mishaps. It seemed for a while that a month did not go by where I did not hear of a friend or classmate who had perished in an aircraft mishap. As a young officer, I vividly remember talking with an Academy classmate several days before he was killed in his RF-4. At the time, it seemed as if his life was yet another chapter in the ever increasing book of friends who had met an untimely death practicing our chosen profession.

After numerous incidents such as this, I decided to study the safety process and try to prevent others from dying. I became the squadron safety officer for a reconnaissance squadron, an airlift squadron, and an academic student squadron and eventually rose to serve as the wing chief of flying safety. I have attended the 6 week flight safety officer's course and have since investigated numerous Class A, B, and C mishaps. All told, I have spent 9 of my 13 rated years in the Air Force as a safety officer. Through my experiences, I have determined that the Air Force has a solid investigation system that works most of the time, but is not at all perfect. Although I have approached this project in a very sound

and logical manner, I have personally seen the system at its worst and witnessing this has added personal motivation to improve it.

Finally, I want to thank Major Tony “Rooster” Klucking for his guidance, inspiration and encouragement in this project. He has been an enormous help to me in preparing this project, but even more importantly, he has provided a professional sounding board for me to express my personal views on safety issues. He is an officer who, like me, sees the safety investigation system not so much for what it is, but what it can be, and is not afraid to get “out of the box” to help it succeed.

Abstract

This paper addresses problems inherent in the aircraft mishap investigation system currently utilized by the United States Air Force. Specifically, it focuses on the position of the Safety Investigation Board (SIB) president. Currently, the USAF is experiencing three major problems with this position—impartiality, training, and operational effects. The current system lacks *impartiality* because it uses senior active duty officers who are simultaneously part of the Air Force system they are investigating. It suffers from poor *training* because these senior officers often have no time to devote to safety training. Finally, it causes undesirable *operational effects* because it requires these SIB presidents to forsake their daily responsibilities to conduct the investigation.

This paper uses original research to propose an unconventional solution to these problems—the use of retired senior officers. Essentially, this author proposes hiring recently retired O-6 and O-7 officers to serve as board presidents. The Air Force can accomplish this by either maintaining a pool of retired officers, or contracting it out to a private firm.

The significance of this proposal is two-fold. First, it improves the efficient use of human resources in mishap investigations; and second, it provides an independent and objective senior officer to lead these investigations. If implemented, this proposal will enhance the USAF safety system--saving lives and increasingly scarce resources.

Chapter 1

Background and Overview

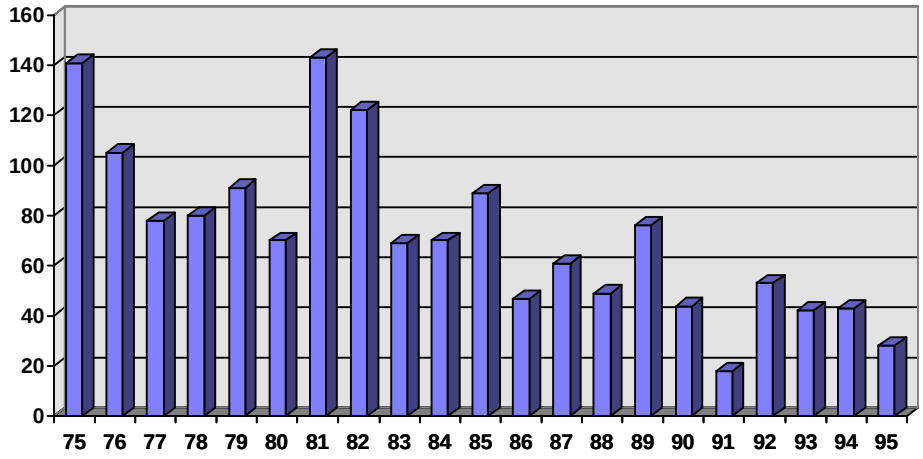
Flying is not inherently dangerous, but even more so than the sea, is terribly unforgiving for any measure of carelessness, incompetence or neglect.

—Unknown

Introduction

Late in 1907, Major General J. Franklin Bell, the newly appointed U. S. Army Chief of Staff, asked Orville and Wilbur Wright to prepare specifications for a military version of their famous Wright Flyer. Orville signed a contract with the U. S. Army on February 10, 1908, and thereafter began the modification by adding a new vertically mounted 30 hp engine and providing dual seating and controls. The U. S. Army selected Lieutenants Frank P. Lahm, Benjamin D. Foulois, and Thomas E. Selfridge to be the first pilots trained in this new military aircraft. Soon after the aircraft passed the requisite tests, Orville Wright took Lieutenant Lahm up as a passenger on a familiarization flight. After successfully completing this first military training sortie, Orville placed Lieutenant Selfridge in the seat and began his familiarization flight. However, soon after takeoff, one of the propellers became entangled in a supporting guy wire, causing a structural failure of the aircraft's wing. The biplane crashed to the earth carrying its two fledgling pilots. Orville Wright was badly injured and spent several weeks recovering in a local hospital;

however, Lieutenant Selfridge sustained fatal injuries.[1] Thus, Lieutenant Selfridge became the first military aviation fatality. Unfortunately, aviators soon learned that Lieutenant Selfridge's fate was not an isolated incident as aviation mishap fatalities climbed steadily up to the end of World War II. After the end of world war II, the aviation community began to concentrate heavily on safety related issues and eventually succeeded in reversing this climbing fatality trend, particularly over the past 20 years. As depicted by the chart below, this downward trend continues today.



Source: Donald D. Engen et al., Final Report of the Blue Ribbon Panel On Aviation Safety, (5 September 1995): 4.

Figure 1. USAF Flight Mishap Fatalities by Fiscal Year (1975-1995)

Problem Definition

The above chart also shows that fiscal year 1991 was a great year for Air Force aviators; experiencing the fewest mishap fatalities ever. However, this year was far from perfect. In 1991, the Air Force lost 18 people and destroyed 38 aircraft. This demonstrates an important point; no matter how successful we are in reducing mishaps, there is always room for improvement. Consequently, if the Air Force is really serious

about continuing mishap reduction, they must make constant improvements to the current safety system.

Accepting the status quo will not bring any further reduction in mishaps. Reducing the number of mishaps can only result from critically evaluating the investigation process and asking how we can improve it. This paper critically examines the USAF safety investigation system by evaluating the SIB composition and proposing improvements. Specifically, it looks at the problems of impartiality, training, and operational readiness, and attempts to mitigate these problems through the effective use of retired senior officers. It is not designed to be a radical change to the current system, just a minor adjustment to help make "zero mishaps" a reality.

Thesis

Currently, the USAF is experiencing three major problems with the SIB president's position—impartiality, training, and operational effects. First, the current system suffers from a perceived lack of *impartiality*. Board presidents feel pressure to conform their investigation reports to higher echelons' wishes of causal factors rather than conducting a completely independent investigation. Second, the Air Force has a hard time maintaining the *training* these senior officers require. Although the Air Force desires a high ranking officer (colonel or above) to serve as the SIB president, theses same officers often do not have the time to dedicate to safety training. Finally, the current system causes undesirable *operational effects*. Because these individuals are usually serving in command positions, the Air Force suffers some loss of operational readiness when they relieve these officers from their daily tasks to fill SIB duties. This proposal addresses the problems of

impartiality, training, and operational effects by researching the feasibility of manning the board president's position with a retired flight rated colonel or general officer. Because these individuals are no longer on active duty, they are not vulnerable to external pressures from the chain of command. Additionally since they are no longer responsible for a full-time command, they can focus their efforts in the safety field and remain current in their SIB duties. By utilizing retired individuals with a great deal of flying and command experience to man these positions, the USAF avoids taxing its current command structure with SIB duties

Research Scope

As stated earlier, this paper critically examines the USAF flight mishap investigation system by evaluating the SIB composition and proposing improvements. Although there are many safety issues that invite attention, the scope of this paper is confined to the SIB president. Furthermore, despite the fact that there are varying degrees of mishap seriousness, this paper considers only Class A mishaps (the Air Force's most serious mishaps-involving death or more than $1 million damage).[2] Therefore, though the author has narrowed the scope of this paper to evaluate only the president's position on Class A safety investigation boards, the benefits of this proposal positively impact the entire safety system.

Research Significance

If the Air Force accepts this proposal, it will solve many of the current problems in today's SIB process and will result in more accurate and efficient investigations. Specifically, this proposal removes the current dilemma board president face; determining

and reporting the truth without fear of reprisal. Additionally, it provides more continuity and training in the mishap investigation process and reduces detrimental operational effects through improved use of personnel resources. This improvement in accuracy and efficiency should reduce fatalities and preserve precious USAF material resources. Although it requires funding to establish, the Air Force will more than recover the costs the first time these changes save a life or prevent a mishap.

Literature Review

The problems involving the SIB president are not new. The starting point for this research project is a paper entitled *Organizational And Conceptional Changes To The USAF Flight Mishap Investigation Process*, also known as project 96-087. This paper was a research project completed by seven Air Command and Staff College (ACSC) students during the 1995-1996 academic year. It was a very comprehensive project that compared the different investigative techniques utilized by the Air Force, Army, Navy, and National Transportation Safety Board. Many of the underlying problems that elicited that project still exist today. However, this paper proposes a completely different avenue of attack to these problems. Essentially, this paper is a continuation of 96-087 with a much narrower scope and a completely different focus.

Other literature used for source and background information included newspaper and magazine articles as well as Air Force reports. This information is the most current and relevant information available on this subject. The media sources provided a great deal of information on current safety trends as well as expert opinions on those trends. Likewise,

the other reports such as the Blue Ribbon Panel on Aviation Safety (BRPAS) provided much of the hard core data and official Air Force positions.

The final waypoint used for this research was current federal regulations and Air Force instructions. This information provided the regulatory framework that constrained this project. Since one of my goals is to make this proposal immediately usable by remaining within current guidance to the maximum extent, these safety, contracting, and financial regulations provided an invaluable source of current information.

Notes

[1]Arch Whitehouse, *The Military Airplane* (Garden City, N.Y.: Doubleday & Co., 1971): 15.

[2]Air Force Instruction (AFI) 91-204, *Safety Investigations and Reports*, (December 1996): 20.

Chapter 2

Current Safety Investigation Problems

If the wheel ain't broke—Make it better.

—Unknown

Introduction

This chapter discusses some of the problems associated with the USAF's current SIB process, specifically concentrating on three main areas—impartiality, training, and operational effects. The first problem is the inappropriate command influence the chain of command often exerts on the board president during a mishap investigation, diminishing his or her impartiality. The next problem concentrates on the severe lack of training that our current eligible board presidents posses. The final problem focuses on the negative operational effects endured by the SIB president's permanent unit when an investigation requires them to leave their normal duties for an extended period of at least 30 days. These three problems strain the USAF's current mishap investigation system, reducing the credibility of the final SIB products.

Problems With The Current System

Impartiality

Merriam-Webster's dictionary defines impartiality as unbiased, not partial, and just.[1] The concept of impartiality is extremely important in the credibility of the safety process. In safety terms, this concept of impartiality means that the mishap investigation board considers all the facts surrounding the mishap to render an unbiased and just evaluation. Most professionals involved in an aircraft mishap are willing partners in the investigation of that mishap as long as they feel the investigators are just. However, once investigators allow external factors to bias the outcome of the process, this cooperation quickly ends. So how well does the current USAF system incorporate this concept of impartiality?

According to some high ranking officials, the USAF does a poor job incorporating impartiality into the mishap investigation process. Mr. Alan Deihl, a former senior safety official at the USAF Safety Agency at Kirtland AFB, New Mexico, alleged that the Air Force covered up, misclassified, and mishandled numerous investigations of aircraft accidents. [2] Mr. Deihl went on to say that during his 7 year career at the Safety Agency, he witnessed dozens of tainted investigations. Furthermore, he stated that he believes investigators are becoming more concerned about shielding senior commanders than preventing future accidents.[3]

One of the mishaps Mr. Deihl specifically mentioned as a cover up was the March 1994 midair collision between an F-16 and a C-130 at Pope Air Force Base, North Carolina. Mr. Deihl claims that senior Air Force officials covered up possible senior level mistakes by pressuring safety investigators not to examine training and operational

decisions that might have contributed to the mishap.[4] This particular assertion seems to have merit in light of a recent Air Force announcement to re-open the Pope investigation. According to an Air Force Times article dated 27 January 97, the Air Force is reopening its investigation into this fatal crash after the Department of Defense Inspector General found the original investigation to be "flawed."[5] Events such as this seem to drastically undercut the credibility of the safety investigation process because it demonstrates how vulnerable the process is to powerful external influences. However, Mr. Deihl is not a lone voice of concern.

Brigadier General Tom Hall echoed Mr. Deihl's concerns in his 1991 letter to then Air Force Chief of Staff, General Merril McPeak. Brigadier General Hall, the former top safety official in the Air Force, expressed his concerns in the following excerpt.

> "I have witnessed command manipulation of mishap costs and classification to improve the command statistics and image, shallow and incomplete investigations into mishap causes, interference by major command staffs with the investigative board process, and punishment of board members for unpopular findings."[6]

This seems a far cry from the unbiased, just, and impartial safety system the Air Force desires. Faced with such severe criticism by so many credible individuals, the Air Force began to look into these allegations. In response to these criticisms, the current Air Force Chief of Staff, General Ronald Fogelman, established a Blue Ribbon Panel on Aviation Safety (BRPAS), in June of 1995. This panel's commission was to review the entire Air Force aviation safety system and recommend changes. Part of the panel's information gathering phase included a survey of USAF safety personnel on *their* perceptions of the safety investigation process.

The results of this survey seem to confirm the criticisms of both Mr. Diehl and Brigadier General Hall. The survey asked respondents whether they believed mishap information collected is accurately reflected in the SIB findings and if board recommendations reflect those findings; only 84 percent felt this was the case.[7] Even more telling, 10 percent of those questioned reported being aware of Air Force command or staff attempts to inappropriately direct safety investigation board findings or recommendations.[8] The fact that a significant portion of those holding these views have safety investigation board experience is an important consideration.[9]

Overall, 11 percent of the respondents and 23 percent of the flight safety officers (generally the most current and trained board members) reported they were aware of an Air Force safety investigation that provided inaccurate results. When asked how they knew, nearly 30 percent claimed *first hand* knowledge.[10] Faced with such indisputable evidence by both high ranking safety officials and field level experts, the Air Force *must* accept that there is a clear lack of impartiality within the current system.

Training

According to Air Force Instruction 91-204, board presidents on Class A mishaps must be a pilot or a navigator in the rank of colonel or higher.[11] The purpose behind these requirements is to provide the SIB a board president with the operational and professional experience that only a senior rated officer can provide. Additionally, the added "horsepower" associated with these senior grades, ensures the SIB obtains the needed resources and overcomes the miscellaneous obstacles to the truth. The maturity, experience, and "horsepower" this officer brings to the board enhances the credibility of the entire investigation process. However, while this requirement for a senior Air Force

officer provides the attributes the system requires, it is often a double edged sword. The operational experience they bring is a time consuming, career long attribute that leaves little time for acquiring, honing, or maintaining skills specific to the SIB process.

During the Blue Ribbon Panel survey, nearly half of the wing commanders and wing chiefs of safety indicated they had not attended the flight safety investigation course.[12] Safety officials designed this particular course to teach flight safety professionals the entire mishap investigation process, qualifying each graduate as a Flight Safety Officer (FSO). Since this is a long 6 week course, it is not surprising that many of the people destine to be board presidents have not attended. However, only 15 percent of these same individuals ever attended the condensed, 2 week Aircraft Mishap Investigation Course (AMIC). This is a disturbing fact as it indicates that at least 35 percent of all wing commanders and chiefs of safety never attended a formal safety investigation course. These formal safety investigation courses should not be confused with the 2 to 3 day administration courses many of them attended. For example, the chief of safety course teaches new wing chiefs of safety how to administer their day to day responsibilities while *only* the FSO and AMIC courses teach you how to actually investigate a mishap.

Another concern stems from the survey lumping wing commanders and chiefs of safety together in one category. Wing commanders are usually O-6 or O-7 officers, and thus are qualified to serve as board presidents. Conversely, chiefs of safety are usually O-4 or O-5 officers who posses more safety training, but are ineligible to serve as board presidents because of their rank. The end result of this analysis is that the bulk of the experience reflected in the survey came from the chiefs of safety. Thus, many of the wing commanders and vice wing commanders, who are the people who actually fill the board

president position, have no formal safety training at all. Why has this training taken such a low priority? The answer is simple; time. Statistically, most senior officers never actually serve on a SIB, so it is simply not worth their investment of time to attend a formal safety training course.

Another important factor is that these individuals often experience a high turnover rate, staying in their assignment for only 1 to 2 years. This lack of continuity further exacerbates the training issue. The bottom line is that the one person who is in the best position to establish the impartiality of the investigation process—the SIB president—is often the least experienced and poorest trained board member. Having received little or no formal safety training, the SIB president must often learn the ropes on the job. Although this is not the case in every instance, the fact that it happens at all severely reduces the credibility of the resulting final report. However, there is an additional issue the USAF must address; the strain that a mishap investigation causes on the board president's unit during his or her absence.

Operational Effects

As stated earlier, the individuals qualified to perform board president duty usually come from the senior echelons of operational units. The following story from *Flying Safety* magazine, describes what happens in those first critical hours after a serious aircraft mishap:

> It was 0645, and I had just returned from my morning jog. My wife called to say the command post was on the line. Nothing terribly unusual about that, given the wing commander was away. However, my sensors quickly went on alert when the duty controller said there was an Air Mobility Command general officer requesting a phone patch with me.

> The patch took seconds to complete. The message took a bit longer to digest. "The commander wants you to proceed to another Air Force Base to investigate an airlift aircraft mishap. How soon can you get there?"
>
> My commander was off station. I was in charge. Surely there must be someone else available, especially since my boss was away and, thus, incur a dual absence. My comments were noted, but again I was asked how soon I could be there. After asking some questions of the transportation management office, I informed the general the earliest I could be there would be the next morning. That was not good enough. I was told a C-21 would be waiting for me in 2 hours. I would proceed to the site via Scott AFB for further instructions so as to be in place by midnight.[13]

This article was hypothetical; however, a colonel wrote it based on his experiences as the chief of safety for a numbered Air Force. The point of this article is to demonstrate that when a mishap does occur, it *will* take priority over *every* obligation the investigators have as well as over all functions of an operational unit. The perishable nature of the evidence in any safety investigation demands that all the SIB participants arrive on the crash scene as soon as possible and remain on scene a minimum of 30 days. Although this is clearly important, this unexpected long term absence can have multiple adverse effects on the unit left behind.

The reorganization effort of the early 1990s further complicated this issue. During this time, many of the wing commander positions converted to O-7 billets. Although this served its purpose in the overall manning of the Air Force, it resulted in some negative fallout in the readiness of the wing. The first problem this caused is numerically based. There are currently 4,158 colonels in the USAF. However, there are only 140 brigadier generals.[14] Converting wing commander billets from O-6 to O-7 shifted many responsibilities from a large colonel pool to a much smaller brigadier general pool.

Because of the requirements of being a flag officer as well as a wing commander, current wing commanders find themselves stretched to the limit, spending more time off

station on Temporary Duty (TDY) then was traditionally the case. These additional TDYs include promotion boards, CORONA conferences, and other high level meetings. As a result, many of the daily functions of the wing fall to the vice wing commander or the various group commanders. Pulling any of these individuals from the unit on a no-notice and extended basis degrades the operational readiness of that unit. This operational readiness is already strained to the limit by the fact that Air Force personnel are currently spending over 85 percent more time TDY then they were just 4 years ago.[15]

Bringing The Problem Into Focus

Having established the inherit SIB problems of lack of impartiality, poor training, and degraded operational readiness, the focus of this paper can now shift to determine how to correct these problems. The key to correcting these problems is the USAF's method for selecting the SIB president. Clearly, the board president is in a unique position to ensure the impartial direction of any mishap investigation. While the other board members are specialists in their particular area of expertise, they work for and at the discretion of the board president. The board president is in charge and his or her position *is* the final position. Therefore, any attempt to improve the entire SIB process, must focus on the proper and unbiased leadership provided by the president.

The board president is also at the heart of the training issue. It is the board president who usually lacks the proper SIB training to accomplish assigned duties. The president usually comes from a high tempo billet and rarely has the time available to receive proper SIB training. Conversely, the other members of the SIB are usually much more current and qualified in their assigned tasks.

Finally, the board president is central to the readiness problem. Although all units suffer when a key member leaves to man a SIB, because the president usually holds a position of considerably greater responsibility in his or her home unit, the effects are even more acute. Thus, the focus in fixing all the problems described in this chapter must center on the *board president*.

Summary

This chapter established a foundation for the SIB problems currently facing the Air Force. Specifically, this chapter discussed impartiality and the fact that this concept does not exist in all cases. The credible accusations of former senior personnel at the Air Force Safety Center as well as the documented survey results of the BRPAS seem to corroborate this. Next, this chapter discussed the qualifications of the SIB president as directed by AFI 91-204. While this is the key position on the board, the senior officer who fills it often has little or no investigation training. This lack of training coupled with the high turnover rate for these officers, establishes a weak link in the safety chain. Next, this chapter outlined the problems suffered by a unit who loses a senior leader to investigate an aircraft mishap. Pulling these people from their duties to join a SIB can adversely affect the readiness of that unit. Finally, this chapter established the fact that the board president is the key to establishing the scope and fairness of any investigation. The president is the person tasked with the overall conduct of the investigation and the one person that has the ultimate authority and obligation to ensure the report is truthful.

Notes

[1]Merriam-Webster Dictionary, 3d ed., s.v. “impartiality.”

Notes

[2]Steven Watkins, "Are investigations mishandled?" *Air Force Times*, (29 May 1995): 3.

[3]Ibid.

[4]Ibid.

[5]Julie Bird, "Pope investigation is reopened" *Air Force Times*, (27 January 1997): 4.

[6]Steven Watkins, "Are investigations mishandled?" *Air Force Times*, (29 May 1995): 3.

[7]Donald D. Engen et al., *Final Report of the Blue Ribbon Panel On Aviation Safety*, (5 September 1995): E-2.

[8]Ibid.

[9]"The Air Force Blue Ribbon Panel On Aviation Safety," *Flying Safety*, (October 1995): 14.

[10]Donald D. Engen et al., *Final Report of the Blue Ribbon Panel On Aviation Safety*, (5 September 1995): E-2.

[11]AFI 91-204: 28.

[12]Donald D. Engen et al., *Final Report of the Blue Ribbon Panel On Aviation Safety*, (5 September 1995): E-2.

[13]John J. Mitchell, "The Interim Safety Board," *Flying Safety*, (April 1996): 12.

[14]Department of Defense, "Defense Almanac '96," (Washington D.C.: Government Printing Office, 1997): 19.

[15]Lance H. Marburger, "Turning Up The Tempo," *Army Times*, (1 July 96): 14.

Chapter 3

Solution

Look not mournfully to the past; it comes not back again. Wisely improve the present; it is thine.

—Henry Wadsworth Longfellow

Chapter Introduction

Thus far, this paper identified the three major problems inherent in the current USAF mishap investigation system—impartiality, training, and operational effects. This chapter proposes a solution to these problems by employing recently retired colonel and general officers to serve as presidents for future SIBs.

Proposal Options

There are two basic variations to this proposal. First, the USAF can establish and maintain an *Air Force Managed Pool* of retired officers to serve on a consultant basis as SIB presidents. Second, the USAF can establish a *Contracted Pool* through a private firm to accomplish this task.

Air Force Managed Pool

Under the first variation of this proposal, the Air Force identifies qualified senior rated officers who have recently retired or are in the process of retirement, and solicits their

participation in this program. To get this program started, they receive training in aircraft mishap investigation procedures and maintain their safety investigation currency through a local flying safety office. Once entered into this pool, they will serve as SIB presidents about once a year. By limiting their eligibility to 5 years from their date of retirement, the Air Force can ensure they are reasonably current with present military aviation issues.

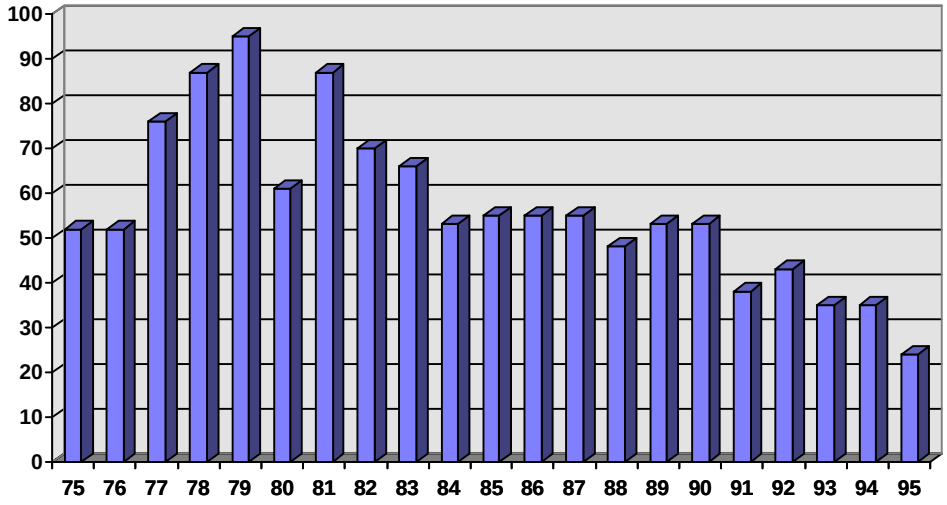
Contracted Pool

Under the second variation of this proposal, instead of the Air Force establishing and maintaining a pool of retired officers, they contract the job out to a private firm. The primary advantage of this proposal is that a private firm then pays the individual participants rather than the US Government, simplifying federal pay and benefits issues. This would essentially become a full time or semi-full time job for the retired officer, paying big dividends in the experience level of future board presidents. The Air Force would simply include the 5 year currency limit as well as the basic minimum requirements in the contract. Under this variation, the Air Force can expect a reduction in the total size of the pool, since each member would probably serve more than once a year.

Proposal Rational

The intent of the regulatory requirement for all Class A mishaps to have an O-6 or higher as the board president is to ensure that the president provides both the leadership and the rank to overcome obstacles. Clearly, the Air Force requires this professional leadership in a body that both determines the cause of the mishap and recommends changes to prevent further occurrence. As the chart on the next page depicts, the number of aircraft destroyed in Class A mishaps has fallen steadily over the past 20 years; a trend

the Air Force would like to continue. There is no doubt that one of the major contributors to this downward trend is the professional leadership provided by past SIB presidents and the sound recommendations their investigations have produced.



Source: Donald D. Engen et al, Final Report of the Blue Ribbon Panel On Aviation Safety, (5 September 1995): E-2.

Figure 2. USAF Aircraft Destroyed by Fiscal Year (1975-1995)

The same qualities of professional maturity that have resulted in this constant safety improvement exist in our retired officer corps. These officers have demonstrated their ability to perform in such a capacity and their mere transfer off active duty does not diminish these qualifications. Thus the decision to use retired Air Force colonels and generals to serve as SIB presidents should provide this same professional maturity, without causing some of the problems associated with active duty officers. Additionally, by limiting them to a window of 5 years from their retirement date, the Air Force can ensure that these valued individuals are reasonably current in Air Force roles and missions. The first and most important aspect of this proposal is the retired officer's impartiality.

Impartiality

According to the BRPAS report, there is a documented perception among Air Force personnel that the convening authority often sacrifices the quality of mishap board results by using board president duty as an O-6 screening test.[1] Although the panel could not specifically substantiate the reality of this perception, they did acknowledge the fact that some MAJCOMs tend to select their board presidents based on their current positions rather than their safety qualifications. A retired colonel or general officer is above any such career building criticism.

Although these retired officers are immune from most career criticisms, it would be naive to think they were totally isolated from the active duty officer corps. In most cases these retired officers still have many active duty connections which can aid them in their investigation. However, these SIB presidents could find themselves in a situation where they are responsible for decisions that may affect the careers of these "connections." Ultimately, this is simply part of every leader's responsibility and beyond the scope of this paper.

Thus, the fact that the outcome of the board does not have any effect on a retired officer's career makes him or her totally independent. This, by default, provides the impartiality the safety system seeks. The impartiality afforded by this proposal allows the SIB president to set a course that encompasses all relevant aspects of evidence, without external pressures to emphasize some areas and omit others. Although this aspect of impartiality alone is justification for such a change to the system, there are other important benefits that retired officers bring to the SIB process as well.

Training

One of the important practical benefits that retired Air Force officers bring to this process is their safety focus. As noted in chapter 2, many of the current officers who are on call to perform duty as a SIB president are not current or trained in their safety responsibilities. The fact that the officers involved in this process are currently filling high tempo billets makes this situation understandable, but unacceptable nonetheless. Retired officers do not have these same problems. A retired officer has the ability to focus all efforts on the SIB process without having to divide his or her time between other operational USAF areas. Thus, they can attend a full 2 week AMIC course as well as any locally generated refresher training. FSOs at each flying unit are currently performing this training so it requires no additional expenses. The Air Force can cut total expenses even further by entering an officer into this program prior to his or her official retirement. This would reduce some of the complications and costs associated with sending retired officers to active duty training courses.

Once the officer is fully trained to serve as a SIB president, the benefits of this program begin to compound quickly. According to the BRPAS, only 30 percent of all eligible wing commanders and chiefs of safety ever served on a mishap investigation board.[2] Additionally, less than 8 percent of these officers served on more than one board.[3] It is important to note that these officers did not necessarily serve as the board presidents on these boards, they simply served as a member of a SIB at one point in their career. Consequently, under the current system, the vast majority of board presidents have *never* served on a board before in *any* capacity. The results are obvious; the majority of board

presidents re-invent the wheel each mishap without any of the benefits provided by experience.

This proposal fixes the experience gap. According to this proposal, the retired officer would serve at least once a year for 5 years. Although they are relatively inexperienced during their first SIB, they carry their experience into each subsequent board. This would average out to an experienced president on four out of every five boards, or 80 percent. This sharply contrasts with the 8 percent experience rate produced by the current system. The experience gained each time can only result in a more competent and efficient process.

Operational Effects

The final problem this proposal eliminates is the current requirement to remove senior leaders from their daily responsibilities to serve on a SIB. Although these senior leaders expect to spend a great deal of time TDY, the short notice and unexpected nature of the SIB process, coupled with the long duration required for closure, creates considerable hardship for their home unit. Utilizing retired officers precludes or at least reduces the number of times active Air Force units have to endure these hardships. Additionally, without the responsibilities of command, the board president is able to concentrate fully on the investigation without worrying about the status of his or her home unit. These changes provides more stability in the higher echelons of flying units which should result in improved operational readiness.

Matching Availability To The USAF's Flexible Needs

In this section, the author determines how many retired officers are available to participate in this program and how many the Air Force needs to maintain a flexible program.

According to the Headquarters USAF Personnel Office at the Pentagon, in calendar year 1996, 26 rated general officers and 365 rated colonels retired from active duty.[4] This substantial flow of annual retirees provides a generous base of potential candidates from which to draw. Assuming the Air Force experiences 30 Class A flight mishaps per year (approximate current number) and each president serves on one board per year, the total number of retired officers required in the Air Force managed pool is about 30. Under the contract version, each participant serves at least two SIBs per year, so the requirement drops to about 15. With a 5 year eligibility restriction, the Air Force will have to recruit at most six newly retired officers into the pool each year to keep this system fully manned. This manning requirement should prove easy to fill given the numbers available.

Flexibility is one of the key benefits of this proposal. The Air Force can expand the pool to provide overlap in certain high incident major weapons systems, or can reduce it if there are not enough eligible participants. This low cost flexibility also helps deal with annual mishap fluctuations. For example, if the Air Force experiences an exceptionally good year with relatively few mishaps, they will not incur any of the expenses involved with a full time staff. On the other hand, if the Air Force experiences a particularly poor year with a large number of mishaps, they can fill any excess requirements through the traditional active duty method. Consequently, this proposal provides a very flexible and

cost effective alternative. Next this author evaluates why a retired officer would want to participate in such a program.

Benefits

From the retired officer's perspective, there are two main selling points that make this proposal attractive. The first and most important point is that it offers them an opportunity to keep active in the affairs of the Air Force. The second selling point is the monetary compensation it provides.

Flexibility Benefits

Most retired officers look forward to the flexibility and relaxation that retired life provides. However, at the same time, they often have reservations about leaving an institution in which they have invested so much. This proposal allows them to do both. By participating in this program, they can remain actively involved in the Air Force while enjoying the other benefits of retirement.

The *Air Force managed pool* version of this proposal employs retired officers to participate in only one investigation per year. Adding the refresher training required to maintain SIB currency, each participant can expect to serve about 45 days per year, leaving 320 days to enjoy their retirement.

The *contracted pool* version of this proposal attracts those retired officers who desire full time employment. These retired officers most likely will work multiple boards per year, affording them a more steady line of employment, while allowing them the flexibility they desire. For example, a retiree may remain in the pool certain months of the year and

block out others. The employing firm awarded the contract works out all the final details. In any case, both proposals include some form of pay benefits.

Pay Benefits

In order to ensure this program attracts quality people, both versions must include financial reimbursement for their period of employment to include travel and billeting expenses. Although this is not the primary motivator for a retired officer to participate in this program, a realistic and equitable sum of compensation is necessary for several reasons.

The first reason monetary compensation is necessary is that it provides a viable interest in the program. Although retired officers want to stay involved in the Air Force after they retire, the pressure and responsibility of a SIB is probably not the means they would choose without fair reimbursement. In many ways, the SIB process focuses on the Air Force at its worst. Sifting through the debris and carnage of a major aircraft mishap or listening to those last few seconds on a cockpit voice recorder is often a painful experience. Although these retired officers are prepared for such tasks, it underscores the point that a mishap investigation is a serious and sometimes unpleasant process.

Another reason to provide monetary compensation is to instill a sense of contractual responsibility. A volunteer often feels a lower sense of responsibility to see a task through to the end. Conversely, an individual who contractually agrees to accomplish this same task for financial compensation, feels an increased sense of responsibility. Professor Herbert Simon supports this assertion in his book *Administrative Behavior*. In this book, Professor Simon notes that organizations that rely on volunteers often suffer from participant's "mild inducement for cooperation."[5] Professor Simon further states that a

paid employee offers the organization his undifferentiated time and effort and the *most effective incentive* that the organization can offer is a salary or wage.[6] Thus, financial compensation is necessary because it provides a sense of contractual responsibility to the SIB process.

The final reason compensation is important is to help maintain interest. Many military O-6 and O-7 retirees are financially secure enough to pay their living expenses (rent, food, transportation, etc.) from their retirement pay. They often work part time as well, but do so only to earn enough extra money to pay for their hobbies and interests. The 45 days these individuals work during a mishap investigation provides additional funds for hobbies, entertainment, etc. The bottom line is that while monetary compensation is not the primary motivator, it is necessary to ensure a viable interest in the program.

Summary

This chapter outlines the basic elements of this proposal. Both versions include the same basic concept of a pool of highly experienced, recently retired officers serving as SIB presidents. The primary difference between the two versions is whether the Air Force manages the pool or a contractor. Next, this chapter demonstrates how retired O-6 and O-7 officers have the professional maturity and experience the USAF seeks without the external pressures levied on their active duty counterparts. As a result of this proposal, retired officers will carry more impartiality, training, and experience into the SIB process.

Another benefit of this proposal is that the SIB president's home unit suffers no adverse consequences. Ultimately, this should increase the readiness of these units. Next, this chapter compared the number of eligible retirees with the number of individuals

required to keep the program viable. Current figures indicate the Air Force has to recruit six new members each year to keep the pool fully manned. Finally, this chapter discussed the important benefits of flexible service and financial compensation. These benefits ensure a viable program by providing dedicated and committed retired officers for years to come.

Notes

[1]Donald D. Engen et al, *Final Report of the Blue Ribbon Panel On Aviation Safety*, (5 September 1995): C-3.

[2]Ibid., E-5.

[3]Ibid.

[4]SrA Vince Fionna, personnel specialist, Headquarters Air Education and Training Command, to Maj K. M. Lampela, electronic letter, subject: Computer Search Results From Headquarters USAF Officer Personnel Section, 18 March, 1997.

[5]Herbert A. Simon, *Administrative Behavior*, (New York: The Free Press, 1976): 114.

[6]Ibid., 115.

Chapter 4

Regulatory Constraints

He that will not apply new remedies must expect new evils; for time is the greatest innovator.

—Sir Francis Bacon

Chapter Introduction

This chapter outlines the limitations involved in this proposal. Of particular importance are the various regulations that affect personnel and pay issues. Specifically, this chapter provides qualification requirements and outlines how much the Air Force can pay retired officers. Finally, this chapter discloses the bottom line cost estimates for both proposal versions.

Proposal Feasibility

AFMAN 36-203, defines an "expert" as a person possessing "superior qualifications and a high degree of attainment and standing in [their] field."[1] Additionally, 5 Code of Federal Regulations (5 CFR) Part 304.102 defines a consultant as "a person who can provide valuable and pertinent advice generally drawn from a high degree of broad administrative, professional, or technical knowledge or experience."[2] Therefore, retired senior officers trained in SIB procedures qualify as "expert consultants" because of their unique combination of professional knowledge and experience. According to AFMAN

36-203, "The services of an expert consultant may be authorized to secure technical advice that is not available within the Air Force or to *provide outside points of view to avoid limited judgment of critical issues*."[3] Thus, it is now easy to recognize that federal and service level regulations consider retired senior officers as expert consultants who can legally serve as SIB presidents.

This concept of using retired officers as expert consultants in safety matters is well established. A recent example of this is the BRPAS. In accordance with Gen. Fogelman's Blue Ribbon Panel Terms Of Reference, the organization of the BRPAS consisted of Vice Admiral Donald D. Engen, USN (Ret.), General Robert C. Oaks, USAF (Ret.), Dr. Hans Mark, and Brigadier General Joel T. Hall, USAF (Ret.).[4] Thus, the concept of using retired officers is common practice in the Air Force and not a radical departure from standard procedures.

Financial Compensation

The last chapter established the need for fair and equitable compensation. This section defines the specific amount of compensation for SIB presidents. AFMAN 36-203 addresses this issue of compensation in part 5.4.2. when it states that compensation for experts and consultants cannot exceed the maximum daily payable rate of a GS-15.[5] According to Mrs. Flo Thompson, Maxwell AFB Civilian Personnel, the daily rate is determined by dividing the GS-15 annual rate of $93,811 by a standard annual hour total of 2087. You can then multiply this hourly rate of $44.95 by a standard 8 hours per day resulting in a maximum daily rate of $359.60. Assuming the individual works 45 days a

year, the annual total compensation is $16,182. However, this causes some concerns about retiree pay limitations.

According to the latest Adjustment To Military Retired Pay Memorandum from the Office of the Assistant Secretary of Defense, military retirees are exempt from retired pay penalties for money earned from the US Government up to $9,819.69.[6] This obviously causes a problem as the $16,182 mentioned above exceeds these limits. The solution to this problem is to reduce the daily compensation amount allowed to the participants.

Under the Air Force managed pool, compensation would have to be reduced to GS-11 maximum compensation levels to meet the $9,819.69 limits. According to current federal pay charts, a GS-11 receives an annual salary of $47,353. Using the standard annual hour figures, this annual rate equates to a daily rate of $181. Multiply this by 45 days and you derive a total compensation of $8168—well within federal limits. It is important to remember at this point that money is not the primary motivator. A retired officer with the experience and training required to accomplish this job is worth more than what the Air Force can pay them under either the GS-11or GS-15 pay scales. However, this proposal allows the retired officer to remain active in the Air Force and compensates them over $8000 annually to do so.

It is easy at this point to understand how the second version of this proposal, the contracted pool, evolved. Under the contract version of this proposal, payment penalties become a mute point. The Air Force awards the contract to an independent firm and pays a set price for the services they provide. Under this version of the proposal, retirement pay limits will not constrain the participants since his or her pay comes from a private firm, not the government. As a result, each participant will most likely work more than one

board per year, viewing it as a full-time or semi-full time job. In the long run, this program costs more money than the Air Force managed pool because of the extra expenses involved in contracting with a private firm. However, this expense is offset by the increased experience level in the SIB process. A retired officer who serves on 2 to 3 SIBs a year participates in 10 to 15 SIBs over the 5 year period. This continuity and experience saves lives and preserves resources, far outweighing any initial costs.

Funding Issues

The final monetary issue this paper addresses is the USAF costs to enact this proposal. Under the Air Force managed pool version, the total cost is about $209,940 per year. This figure is based on a total pool of 30 retired officers. Each one of these retired officers serves on one board per year, receiving $8168 in annual total compensation. This paper assumes all other costs such as travel, billeting, and per diem to remain fixed.

The total cost of the contracted version of this proposal is more difficult to determine. According to Major Skip Gawler, USACOM J-7 staff, the services provided by retired four-star generals during USACOM's joint planning exercise cost the Department of Defense approximately $1000 per day. USACOM awarded this contract to TRW. While this example gives us an idea of the associated costs, the total cost depends on the final negotiated price. Therefore, for planning purposes, this proposal assumes the costs of a contractually managed pool to be double that of the Air Force managed pool or approximately $400,000.

Summary

This chapter outlined the limitations involved in this proposal. Of particular importance are the various regulations that deal with personnel and pay issues. Under current federal and service level regulations, the Air Force can legally hire retired officers to serve as SIB presidents. The Air Force pays these retired officers according to the GS-11 pay scale ensuring they remain within the maximum dollar limits imposed on military retirees. Next, this chapter established the bottom line cost estimates for both the Air Force managed pool version at $209,940 and the contracted pool version at about $400,000. With a full understanding of the factors involved in these proposals, the next chapter recommends a course of action to capitalize on this safety opportunity.

Notes

[1]Air Force Manual (AFM) 36-203, *Staffing Civilian Positions*, (February 1996): 25.

[2]5 Code of Federal Regulations (5 CFR) Part 304, *Expert and Consultant Appointments*, (September, 1995): 132.

[3]AFM 36-203: 25.

[4]Donald D. Engen et al, *Final Report of the Blue Ribbon Panel On Aviation Safety*, (5 September 1995): A-2.

[5]AFM 36-203: 25.

[6]Office of the Assistant Secretary of Defense Memorandum, subject: Adjustment to Military Retired and Retainer Pay and Survival Annuities, (20 November 1995): Attachment 1-2.

Chapter 5

Implementation and Conclusion

You see things; and you say, "Why?" But I dream things that never were; and I say, "Why not?"

—George Bernard Shaw

Introduction

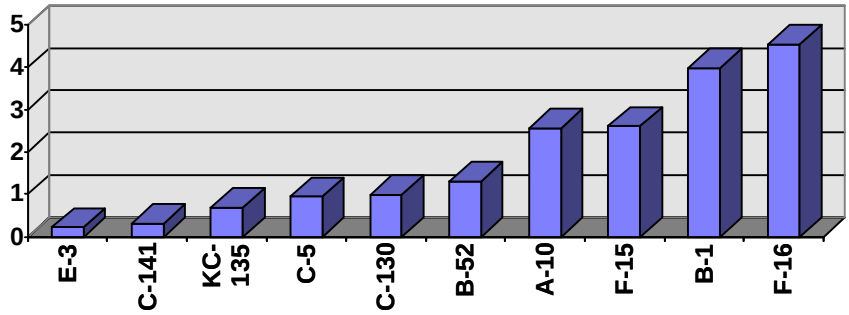
This whole paper has one purpose, to critically examine the SIB president selection process and propose improvements. This final chapter specifically outlines the author's recommendation on implementing the use of retired senior officers to serve as SIB presidents.

Implementation

As mentioned before, one of the best attributes of this proposal is flexibility. Unlike many other proposals, the Air Force can initiate and test these changes on a small scale first, expanding them later when they prove successful. An Action Officer (AO) at the Air Force Safety Center at Kirtland AFB, NM, should manage this program.

The AO's first step is to solicit a volunteer for this project from the roles of retiring Brigadier Generals. This author proposes using a retiring O-7 first, and again expanding this to O-6s later as the program gains success. The AO ensures the retiring officer is fully trained for SIB duties by selecting one who has already attended a mishap investigation

course. Next, the AO updates the retiring officer's currency by scheduling safety refresher training. Preferably, the AO will select a retiring officer with current flight qualifications. Based on the following chart, representing the lifetime Class A mishaps per 100,000 flight hours for the 10 most common USAF aircraft, this author recommends selecting an F-16 pilot. The F-16 is the most likely airframe to suffer a mishap based on their 4 year average of 11 Class A mishaps per year.[1]



Source: "Aircraft Mishap Statistics," *Flying Safety,* (December/January1996/1997): 21-28

Figure 3. Lifetime Class A Mishaps per 100,000 Flight Hours

Although this proposal eventually requires a change to the SIB president requirements outlined in AFI 91-204, all that is required for the initial test board is a simple waiver. The AO from the Safety Center will accompany the retired officer throughout the investigation. After the process is complete, the AO will compile an after action report that includes the demonstrated benefits, problems encountered, and future recommendations. The Safety Center will correct any problem areas noted in this report and begin the process all over again. After three iterations of this process, the Air Force Chief of Safety will evaluate the program and either expand it to a fully functional pool of SIB presidents, or reevaluate this proposal's merits. Only through a deliberate and

comprehensive process such as this, can the Air Force hope to develop a well-managed and well-executed solution to the current problems.

Conclusion

The purpose of this paper was to identify problems with the current USAF aircraft mishap investigation process and propose a solution. This paper has clearly identified and described three major problems with this process—impartiality, training, and operational effects. The current system lacks *impartiality* because it uses senior active duty officers who are subject to many influences outside the investigation, as SIB presidents. The high level testimony of Mr. Deihl and Brigadier General Hall as well as the results from the BRPAS confirm these accusations.

Additionally, this paper documents the fact that most board presidents called to preside over Class A SIBs lack the necessary *training* to accomplish this important task. The realities of the day to day work load these senior officers accomplish make this situation understandable. However, this lack of training and preparation degrades the integrity of the process and is ultimately unacceptable. This problem becomes even more acute when one considers the negative *operational effects* caused by these senior officers' departure from their home station to participate in an investigation. The Air Force can improve the current process and eliminate many of the major deficiencies by changing the criteria for SIB presidents.

To resolve these various problems, this project proposed allowing retired O-6 and O-7 officers to serve as board presidents. This preserves the Air Forces' desire to place only accomplished and professionally mature senior officers in the board president role, while

maintaining a completely independent perspective. Next, this paper demonstrated how the proposal was fiscally possible with minimum costs. The two basic variations of this proposal are 1) maintain an Air Force managed pool of senior officers, and 2) contract the services out to a private firm. The Air Force managed pool is less costly and more flexible than the contract pool, but requires more time and effort to develop and maintain. The contract pool is easier to manage but costs the Air Force more money.

The final and most important portion of this proposal is the implementation guidelines. This portion outlines a simple plan for making the proposal happen on a trial basis. Through this plan, the Safety Center can test the waters in a conservative and painless manner. It is the author's sincere hope that by enacting the changes outlined in this paper, the Air Force will develop the mishap investigation process into a more credible and effective system. Accomplishing this saves money in the long term and protects the USAF's most valuable asset; *people*.

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[1]"Aircraft Mishap Statistics," *Flying Safety*, (December/January 1996/1997): 25.

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5 Code of Federal Regulation (5 CFR) Part 304. *Expert and Consultant Appointments.* September, 1995.

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